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## **BI-MONTH! Y REPORT**

Chester M. Dacres DACCO SCI, INC.

Aluminum 2024-T3 samples have been purchased, machined and coated. Eletrochemical corrosion testing is in the process of being performed on these samples, using AC impedance measurement, ellipsometry and X-Ray Photoelectron Spectroscopy (XPS). Electrochemical impedance measurements are being used to acquire a precise impedance signature which will be used to develop a sensor for detecting corrosion processes on aircraft. The objective of this Phase 1 project is to show that a distinct signature obtained from a corroding aircraft surface can be used to develop a sensor.

Data have been collected using AC impedance testing and X-Ray Photoelectron Spectroscopy.

A detailed report has been mailed to the program manager, Major Thomas E. Erstfeld.

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